



***Gnomonia leptostyla* Causer of Walnut Anthracnose in Iraq and Its Biochemical Resistance**

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Abstract: *Gnomonia leptostyla* (Fr.) Ces. et de Not. (*Marssonina juglandis* (Lib.) Magn, has been detected as the fungus that causes walnut anthracnose in Iraq, dependence on the presence of a cervuli on the dead tissue of leaves and the morphology of the fungal colony and microconidia. The brown spotting disease (anthracnose) causes weakness of walnut trees falling leaves and the lack of and poor fruits. Symptoms revealed that in early May on the lower surface of the leaves in the form of small necrotic spots surrounded by a yellow halo, then the necrotic spots increased and spread and began to merge with each other to cover most of the leaf surface, and the leaves began to fall due to the dryness of the stems. The optimum temperature for fungus growth was 22°C. The best medium used was a sabouraud agar. The alcoholic extract of sage and the fungicide (fberusat) were able to inhibit the growth of *G. leptostyla* by 100%. The alcoholic extract of clove inhibited the growth of the fungus 100% at the concentrations (30 and 40 mg ml⁻¹).

Keywords: *Gnomonia leptostyla*, Anthracnose, Walnut, Cloves, Sage, Fberusat
